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SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,
PERU-ECUADOR BORDER, 6 JUNE 1975

K. J. Hill, et al

Teledyne Geotech

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**SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Peru-Ecuador Border, 6 June 1975**

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January 1976

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SDCS EVENT REPORT NO. 64

> Peru-Ecuador Border, 16 June 1975.

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is: *given*

	"P" Arrival	Origin Time	Lat.	Long.	m_b	M_s
NORSAR	14:34:05.9	14:21:04	03 S	077 W	5.2	N/A
LASA	14:30:38.7	14:21:54	01.9S	080.1W	5.1	N/A
PDE		14:21:09.5	03.8S	076.8W	5.1	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

14:20:54.2 03.9S 076.9W 5.1 3.7

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR. Horizontal SP channels at all SDCS stations were rotated.

Long-period signals were recorded at WH2YK, CPSO, FN-WV, ALPA and NORSAR. HN-ME and RK-ON did not record LP signals for this event and were not included in this report. Horizontal LP channels at FN-WV and WH2YK were rotated. At CPSO, horizontal LP channels were not rotated because the LP north channel was inoperative. Validity of ALPA and NORSAR long-period vertical beams is uncertain and horizontal beams were not included because of program recovery problems. LASA long-period data were not recoverable.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES		ELEVATION METERS	INSTRUMENTATION	
		DEG	MN SECS		SHORT - PERIOD	LONG - PERIOD
ALPA	Alaska	65 14	00.0 N 147 44 36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35 35	41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32	58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41	19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09	43.0 N 067 59 09.0 W	213	18300	SL210 V SL220 H
NORSAR	Kjeller, Norway	60 49	25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50	20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41	41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be 316° + 5° based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 6 JUN 75
 14:21:54.0 1.900S 80.100W 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CAIC	REST	REST	REST
CPO	14 28 32.4	0.2	0.8	40.2	349.1
FN-WV*	14 28 52.7	2.9 *	3.1 *	42.4	357.0
HN-ME	14 29 53.4	0.3	-0.1	50.5	8.1
RK-CN	14 30 35.8	-0.4	-1.1	56.4	347.3
LAC	14 30 38.7	-0.3	0.0	56.7	336.2
WH2YK	14 32 56.6	0.5	0.2	78.4	334.8
NAC	14 34 05.9	-0.2	0.2	92.3	29.3

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LCNG.	DEPTH (KM)	SDV	IT	STA
14:21:53.0	1.698S	76.969W	449. CALC	0.4	5	6
14:20:54.2	3.948S	76.939W	0. REST	0.6	3	6

CAIC				REST			
4	.	2		4	.	2	
0	.	0	0	0	.	0	0
0	0.	0	0	0	0.	0	0
.
0	0.	0	0	0	0.	0	0
0	.	0		0	.	0	
0	.	0		0	.	0	

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 1.02
 MAJOR 88.7KM. MINOR 57.6KM. AZ= 25 AREA= 16062 SQ.KM. FST

*FN-WV NOT USED IN HYPOCENTER DETERMINATION BECAUSE OF POOR FIT.

DATA SUMMARY

INPUT FOR EVENT 6 JUN 75
 14:21:54.0 1.900S 80.100W OKM.

STA.	PHASE	ARRIVAL		INST	PER	A/T	MAGNITUDE		DIR	DIST
		TIME					MB	MS		
CFC	EP	14 28	32.4	SPZ	0.9	156.	5.31			40.2
CPO	LQ	14 40	18.0	LPT	25.0	46.				
CPO	LR	14 43	14.0	LPZ	21.0	21.		4.05		40.2
FN-WV*	EP	14 28	52.7	SPZ	1.0	80.	5.10			42.4
FN-WV	LQ	14 41	25.0	LPT	24.0	33.				
FN-WV	LR	14 43	37.0	LPZ	23.0	18.		4.00		42.4
HN-ME	EP	14 29	53.4	SPZ	0.9	36.	4.96			50.5
RK-ON	EP	14 30	35.8	SPZ	0.9	77.	5.39			56.4
IAC	EP	14 30	38.7	AB	0.8	27.	4.93			56.7
WH2YK	EP	14 32	56.6	SPZ	1.1	15.	4.73			78.4
WH2YK	LR	15 07	51.0	LPZ	23.0	6.		3.79		78.4
AIPA	LR	15 15	40.0	LPZ	19.0	1.		3.05		85.6
NAO	EP	14 34	05.9	AB	1.3	33.	5.35			92.3
NAO	LR	15 08	30.0	LPZ	23.0	5.		3.78		92.3

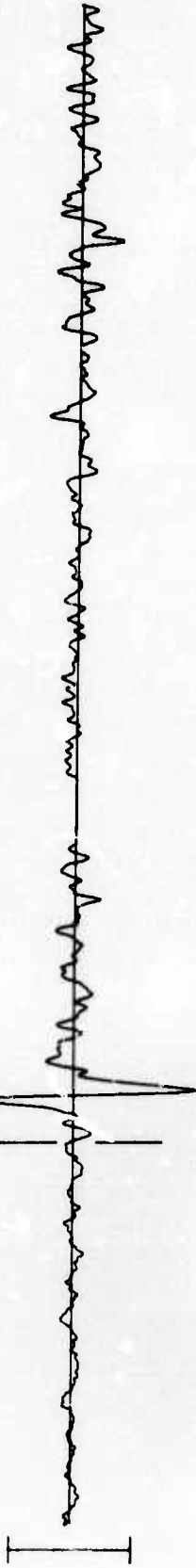
ORIGIN	IAT.	LONG.	DEPTH (KM)	MAG	SDV	STA	LPMAG	LPSDV	LPSTA
14:21:53.0	1.698S	76.969W	449. CALC	4.59	0.35	6	3.72	0.4	5
14:20:54.2	3.948S	76.939W	0. REST	5.11	0.27	6	3.74	0.4	5

*FN-WV NOT USED IN HYPOCENTER DETERMINATION BECAUSE OF POOR FIT.

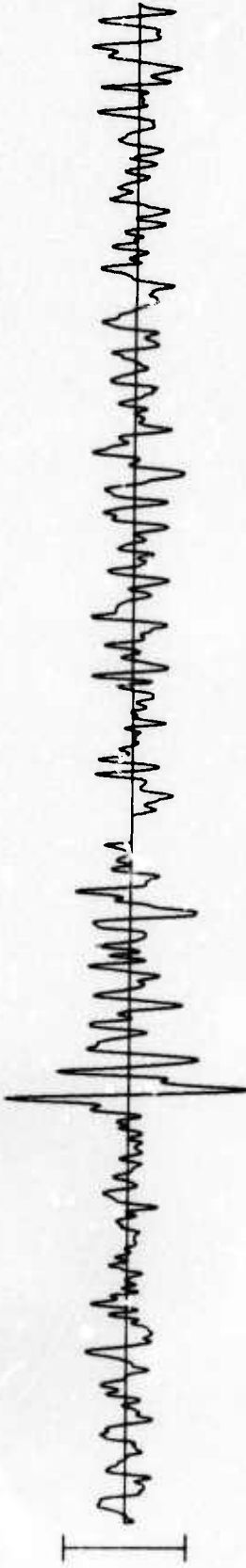
CPSO 06 JUN 75

14:28:32.4

**SPZ
88.46 MHz**



**SPR
26.94 MHz**



**SPT
8.05 MHz**



TIME



10 SEC

14:29:00

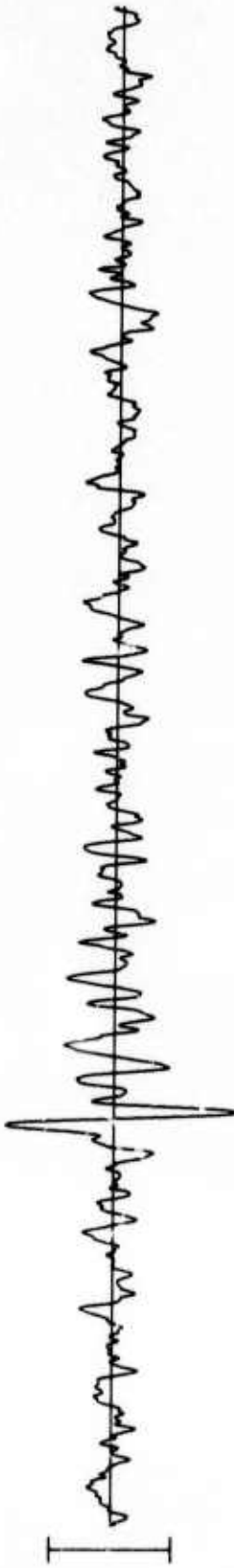
FN-WY 06 JUN 75

**SPZ
42.54 MP**

14:28:52.7



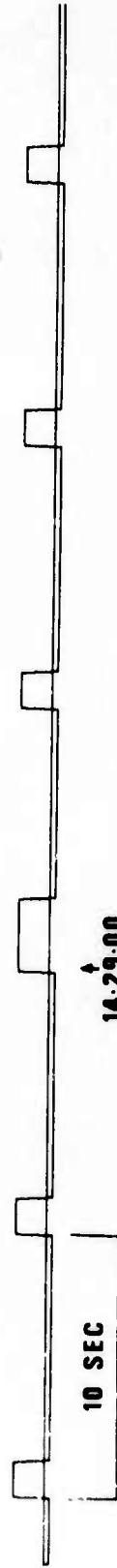
**SPR
26.81 MP**



**SPT
13.20 MP**



TIME

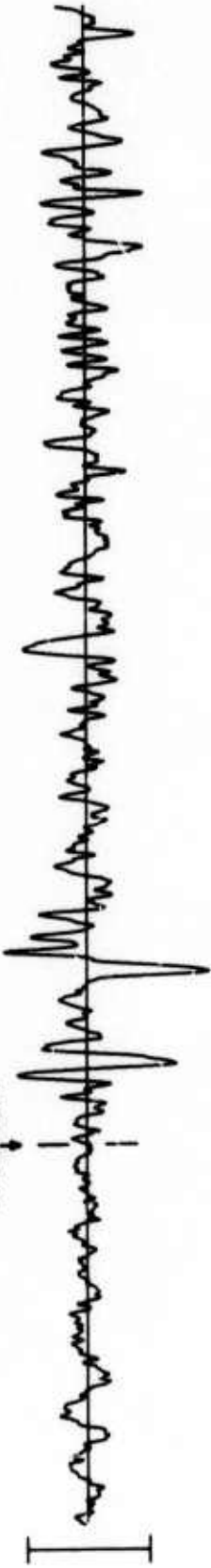


10 SEC

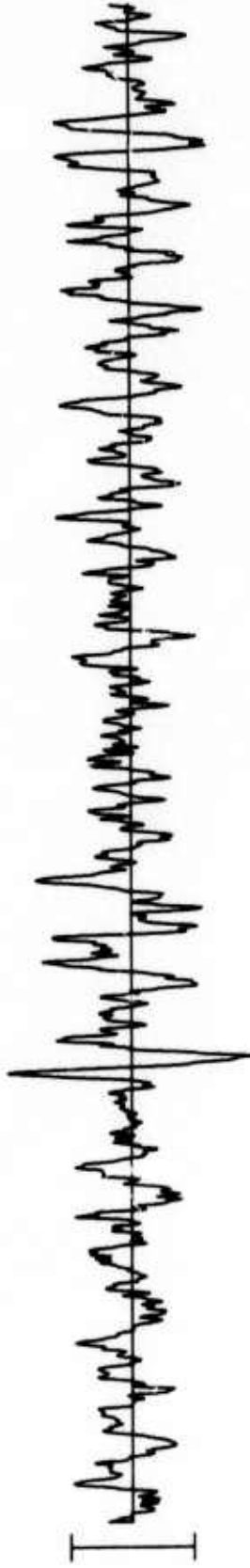
14:29:00

HN-ME 06 JUN 75

SPZ
33.55 MHz



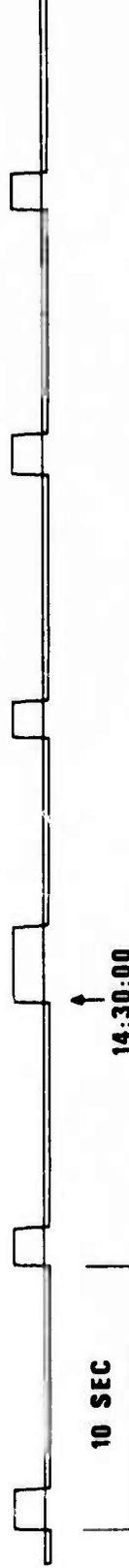
SPR
15.18 MHz



SPT
11.63 MHz



TIME



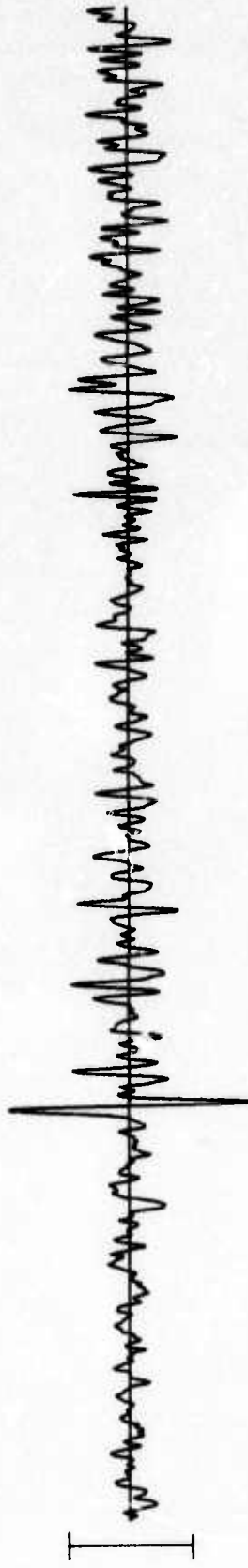
RK-ON 06 JUN 75

**SPZ
49.10 MP**

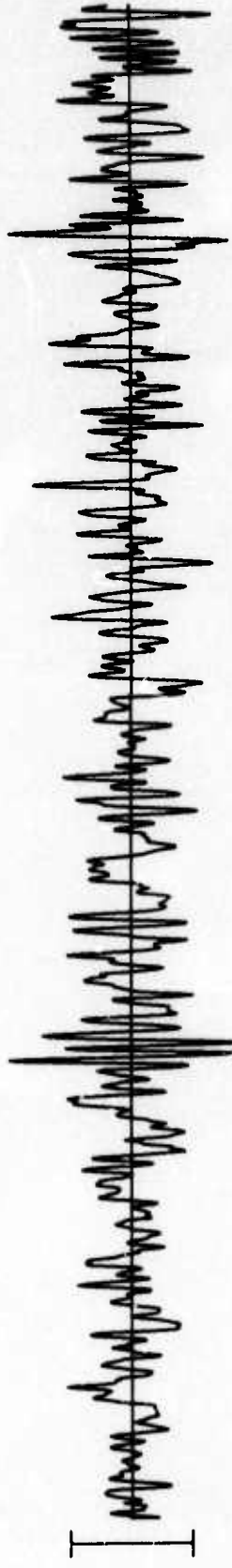
14:30:35.8



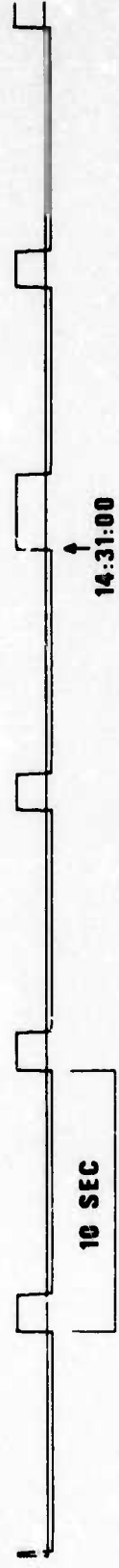
**SPR
22.24 MP**



**SPT
9.39 MP**



TIME

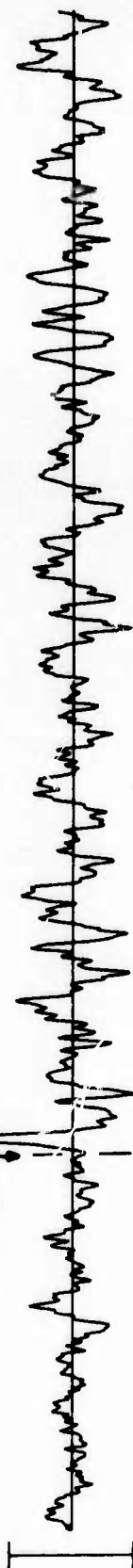


10 SEC

14:31:00

WH2YK 06 JUN 75

14:32:56.6



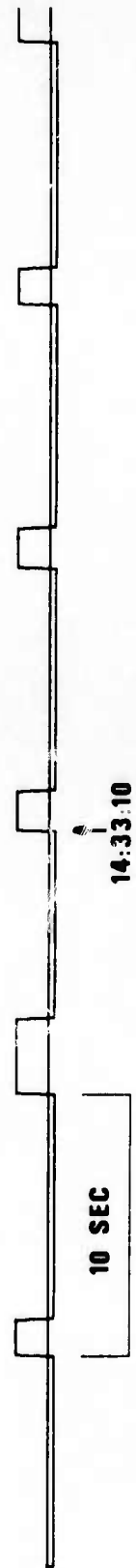
SPZ
10.14 MHz



SPR
16.14 MHz



SPT
12.07 MHz



TIME

10 SEC

14:33:10

LASA

1 6 JUN 1975

2 14 21 22 1.3S 78.8W 33C C 5.1 107 ECUADOR

3 14 30 38.4 LAO P 27.5 0.9 15.2 53.5 145.1

EPX 32705

BP-B 0.6-2.0 HZ

ABN 8.5

14:30:28.4

AB 88

FAB 75

WAB 74

PAB1 83

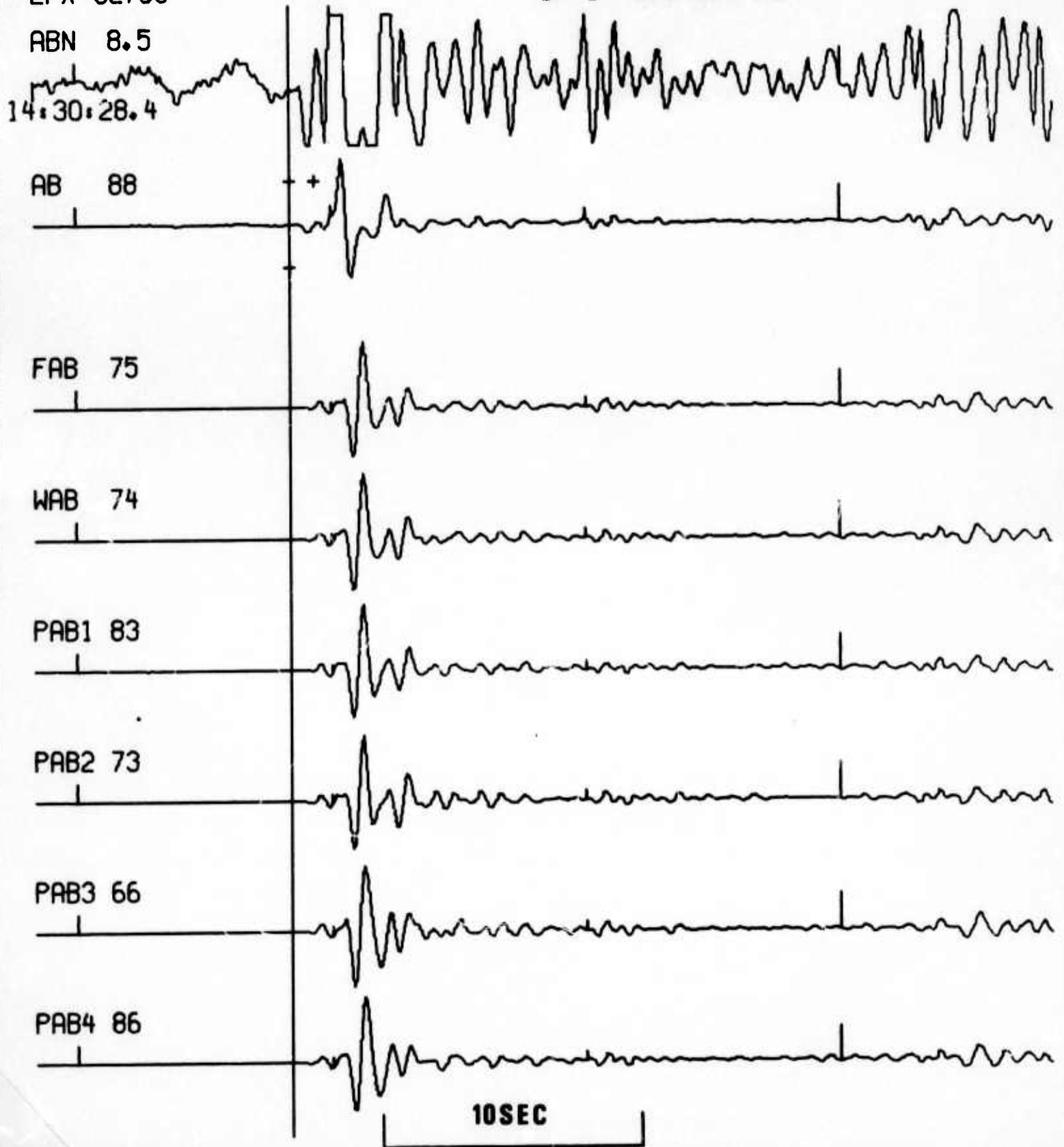
PAB2 73

PAB3 66

PAB4 86

10SEC

//



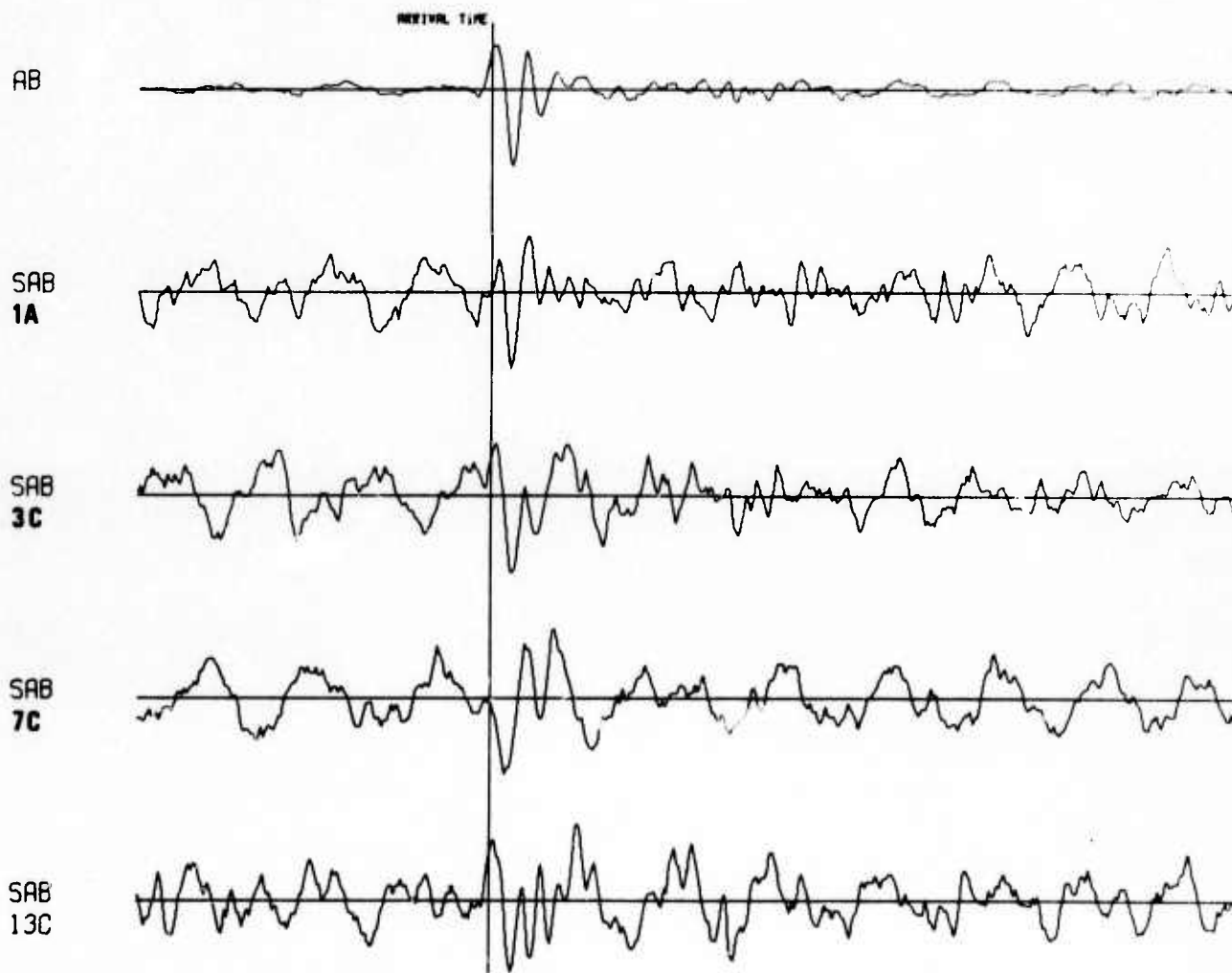
NORSAR EVENT FILE

1975 JUN 6

EPX NO. 10760 ARR. 14.34.6.5 2.9S 76.7W 5.0MB 33KM

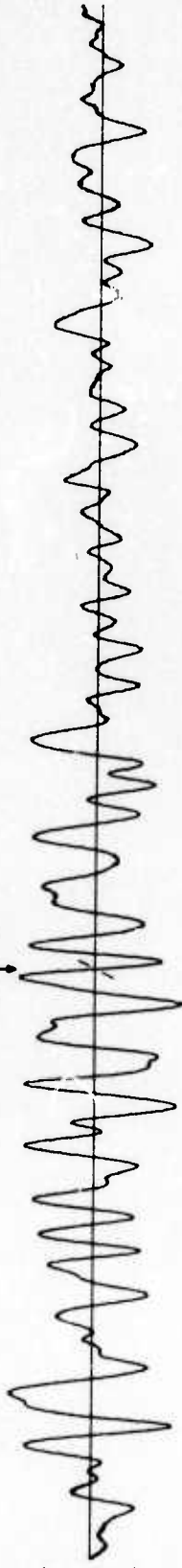
DIST = 91.3 AZI = 266.4 AMP = 9.6 PER = 1.2 UMETH 2

SCALE  = 5 SECONDS



CPSO 06 JUN 75

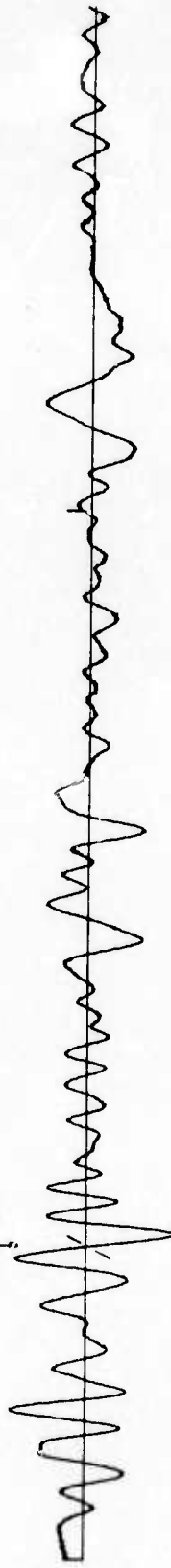
14:43:14



LPH
INOPERATIVE

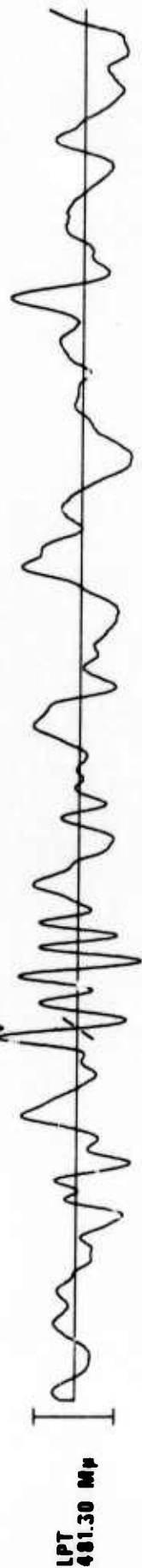
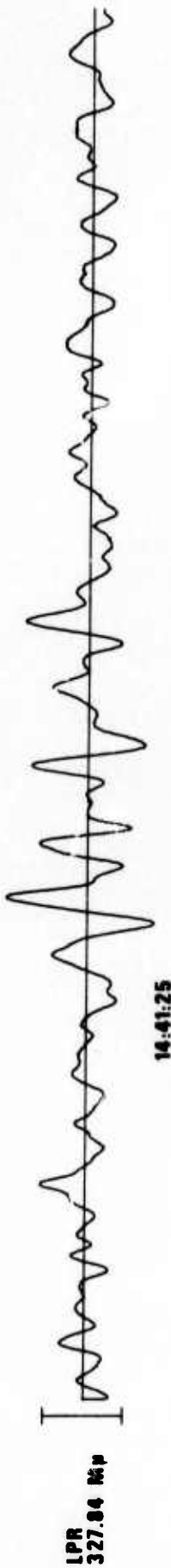
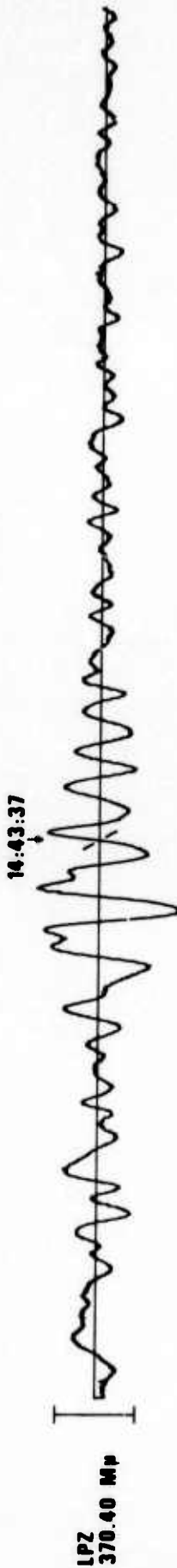


14:46:18

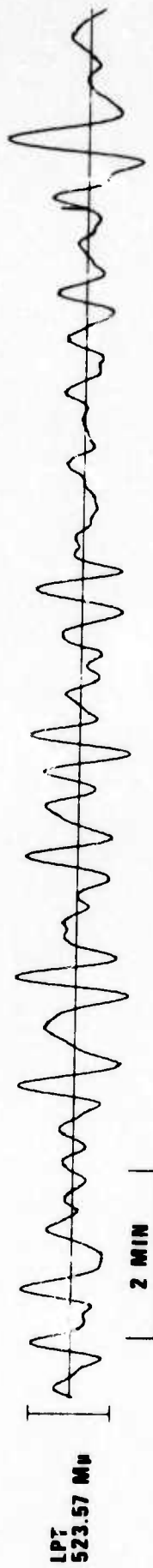
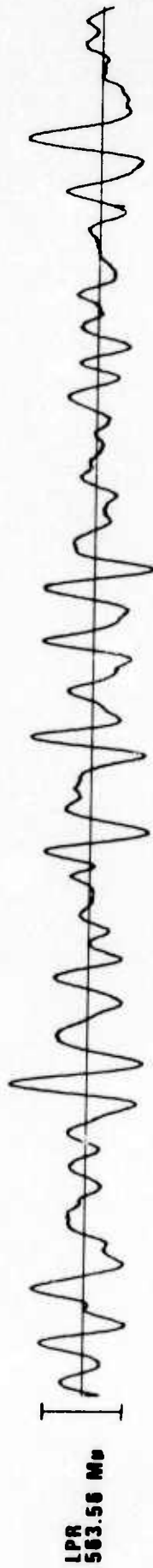
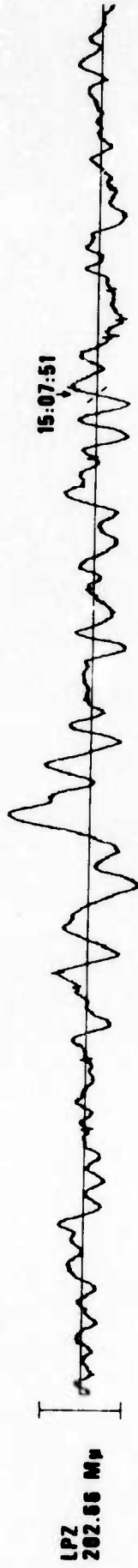


2 MIN

FN-WV 06 JUN 75



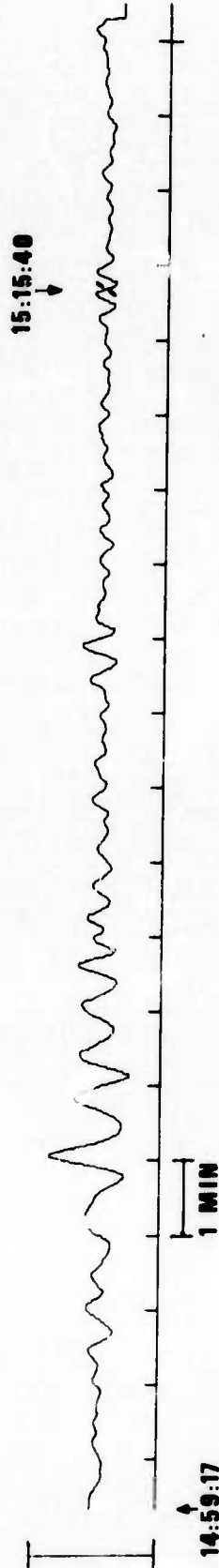
WH2YK 06 JUN 75



ARRAY LONG PERIOD VERTICAL BEAMS 06 JUN 75

ALPA

LP VERTICAL
113.25 MHz



NORSAR

LP VERTICAL
150.81 MHz

